ECVP/ESVP Summer School in Veterinary Pathology

Marie Curie Training Courses

Summer School 2006 – Eye 06RD0362

Research No.: 06RD0362

Owner: Olsauer, S.

Animal: Pepper

The tissue submitted is the formalin-fixed left globe from an 11-year-old neutered male Miniature Schnauzer dog. Grossly and histologically, there is a full-thickness defect in the central cornea with iris prolapse. Upon sectioning, the lens capsular bag contained a prosthetic intraocular lens. Histologically, there is a suppurative inflammatory infiltrate in the central cornea at the margins of a full-thickness defect. There is traumatic and broad adhesion of iris tissue and prolapse of iris tissue into the affected areas. There are multiple breaks in Descemet's membrane. Descemet's membrane and the overlying corneal stroma are heavily infiltrated by fungal hyphae. Hyphae tend have a repeating subunit of rounded segments in a pattern *not* typical of aspergillus. There is extensive hemorrhage and fibrin exudation around the capsular bag. There is a spindle cell proliferation extending into the anterior vitreous. There is extensive vitreous hemorrhage. There is retinal detachment. The retina contains numerous of ganglion cells. There is moderate gliosis of the optic nerve head.

Diagnosis:

1. Status post-operative cataract surgery
2. Corneal perforation with iris prolapse
3. Extensive deep corneal stromal mycosis, unidentified fungus
4. Extensive intraocular hemorrhage with neovascular proliferation
5. Retinal detachment
6. Glaucoma, as per history

Comments:

Unfortunately, we cannot be more specific about the species of fungus based on histopathology alone.